

Grant County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 5/24/2016

Using the most recent IMPLAN data available (2014) adjusted for 2016, 15 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Grant County economy.¹

These 15 sectors have a total direct output of approximately **\$61.9 million** and support **547.9 jobs** in Grant County. Running the model for all 15 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Economy									
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product			
Direct Effect	547.9	10.56%	\$301,258,529.50	59.19%	\$617,931,928.75	121.40%			
Indirect Effect	611.6	11.78%	\$26,730,822.41	5.25%	\$60,827,807.50	11.95%			
Induced Effect	345.0	6.65%	\$25,114,025.84	4.93%	\$47,219,012.18	9.28%			
Total Effect	1,504.5	28.98%	\$353,103,377.75	69.37%	\$725,978,748.43	142.63%			

As shown in the above table, agriculture, food, and food processing sectors support 1,504.5 jobs, or 28.98% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$726 million, roughly 142.63% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 15 agriculture, food, and food processing sectors is approximately \$353.1 million, or 69.37% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 69.37% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **474 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Grant County.

Top Ten Sectors by Employment					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	474.0	\$540,168,638.99			
Support activities for agriculture and forestry	324.5	\$13,952,385.24			
Wholesale trade	80.3	\$17,573,872.72			
Truck transportation	64.0	\$10,650,466.22			
Real estate	42.5	\$5,276,409.84			
Limited-service restaurants	39.9	\$2,797,324.47			
Hospitals	36.0	\$5,149,679.22			
Monetary authorities and depository credit intermediation	33.5	\$6,220,205.32			
Extraction of natural gas and crude petroleum	27.5	\$3,519,974.42			
Full-service restaurants	22.8	\$938,361.56			

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$540.2 million** to the Grant County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry..

Top Ten Sectors by Output					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	474.0	\$540,168,638.99			
Grain farming	20.7	\$59,514,444.51			
Wholesale trade	80.3	\$17,573,872.72			
Support activities for agriculture and forestry	324.5	\$13,952,385.24			
Truck transportation	64.0	\$10,650,466.22			
Owner-occupied dwellings	0.0	\$10,489,944.28			
Animal production, except cattle and poultry and eggs	10.0	\$6,278,772.34			
Monetary authorities and depository credit intermediation	33.5	\$6,220,205.32			
Real estate	42.5	\$5,276,409.84			
Hospitals	36.0	\$5,149,679.22			

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Grant County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	0.1	\$1,222,001.36		
Grain farming	20.7	\$59,514,444.51		
Vegetable and melon farming	0.3	\$167,392.81		
Greenhouse, nursery, and floriculture production	1.2	\$415,819.00		
Cotton farming	0.2	\$129,835.73		
All other crop farming	4.2	\$2,626,681.90		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	474.0	\$540,168,638.99		
Dairy cattle and milk production	4.1	\$3,851,691.24		
Poultry and egg production	0.0	\$93,952.97		
Animal production, except cattle and poultry and eggs	10.0	\$6,278,772.34		
Bread and bakery product, except frozen, manufacturing	6.6	\$876,459.50		
Frozen cakes and other pastries manufacturing	0.2	\$25,999.63		
Tortilla manufacturing	1.9	\$384,833.92		
Veterinary services	16.8	\$1,421,997.75		
Landscape and horticultural services	7.5	\$753,407.10		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Grant County, the retail sector was omitted.